

AMENDMENTS TO THE CLAIMS

1-38. (Canceled)

39. (**Currently Amended**) An integrally-formed immediate provisional dental implant elongated along an implant axis, comprising:

an abutment adapted to bond with a dental prosthesis;

a flexible neck segment connected to the abutment[.];

a body segment connected to the flexible neck segment, the body segment having threads extending helically about the implant axis, the thread diameter tapering non-linearly from a maximum adjacent the neck segment to a minimum at a distal end; and

a torque engagement segment positioned below the flexible neck segment and above the body segment, said torque segment configured to engage a torque-imparting tool.

40. (Previously Presented) The immediate provisional dental implant of Claim 39, wherein the threaded body segment comprises an upper flared section proximal to the neck segment, an intermediate section and a tapered lower section distal from the neck segment, the lower section having a smaller angle of taper as compared to the upper section.

41. (Original) The immediate provisional dental implant of Claim 40, wherein threads of the upper flared section define a taper angle between about 6° and 14°.

42. (Original) The immediate provisional dental implant of Claim 40, wherein threads of the tapered lower section define a taper angle between about 3° and 7°.

43. (Original) The immediate provisional dental implant of Claim 40, wherein the neck segment is more narrow than both of the upper flared section of the body segment and the abutment.

44. (Previously Presented) The immediate provisional dental implant of Claim 40, wherein threads of the intermediate section have a constant diameter.

45. (Original) The immediate provisional dental implant of Claim 39, wherein the thread diameter is within the range of about 1.0 mm and 3.5 mm.

46. (Previously Presented) The immediate provisional dental implant of Claim 39, wherein the thread diameter is within the range of about 1.0 mm and 3.0 mm.

47. (Original) The immediate provisional dental implant of Claim 39, wherein the body segment is at least about 12 mm in length.

Appl. No. : 10/691,470
Filed : October 22, 2003

48. (Previously Presented) The immediate provisional dental implant of Claim 39, wherein a length of the body segment is approximately equal to the thickness of the cortical layer of the bone in which the implant is to be emplaced.

49. (Original) The immediate provisional dental implant of Claim 39, wherein the neck segment and abutment form an extension from the body segment with a length of greater than about 3 mm.

50. (Original) The immediate provisional dental implant of Claim 49, wherein the neck segment and abutment form an extension from the body segment with a length of greater than about 5 mm.

51. (Original) The immediate provisional dental implant of Claim 39, having a total length along the implant axis of greater than 17 mm.

52. (Original) The immediate provisional dental implant of Claim 51, having a total length along the implant axis of greater than 20 mm.

53. (Original) The immediate provisional dental implant of Claim 39, having a thread depth tapering from a maximum thread depth adjacent the neck segment to a minimum thread depth adjacent the distal end.

54. (Original) The immediate provisional dental implant of Claim 53, wherein the maximum thread depth is between about 0.5 mm and 0.7 mm.

55. (Original) The immediate provisional dental implant of Claim 53, wherein a thread pitch of the body segment is in the range 0.8 mm to 1.8 mm.

56. (Original) The immediate provisional dental implant of Claim 39, comprising a plurality of flat facets on the outer surface of the neck segment.

57. (Previously Presented) The immediate provisional dental implant of Claim 39, consisting a material selected from the group consisting of titanium and alloys of titanium.

58-61. (Canceled)

62. (Previously Presented) The immediate provisional dental implant of Claim 39, wherein said torque engagement segment further comprises a plurality of flat surfaces configured to engage a wrench.

63. (Currently Amended) An integrally-formed immediate provisional dental implant elongated along an implant axis, comprising:

an abutment adapted to bond with a dental prosthesis;
a flexible neck segment connected to the abutment.

a body segment connected to the flexible neck segment, the body segment having threads extending helically about the implant axis, the threads having an apical surface increasing in width from a minimum adjacent the neck segment to a maximum at a distal end of the body segment; and

a torque engagement segment position between the flexible neck segment and the body segment, said torque segment configured to engage a torque-imparting tool.

64. (New) The immediate provisional dental implant of Claim 63, wherein increase in the width of the flat apical surface of the threads is non-constant.

65. (New) The immediate provisional dental implant of Claim 63, wherein a diameter of the threads decreases as the width of the flat apical surface of the threads increases.

66. (New) The immediate provisional dental implant of Claim 63, wherein the apical surface of the threads is flat.

67. (New) The immediate provisional dental implant of Claim 66, wherein the apical surface of the threads is generally parallel to the implant axis.

68. (New) The immediate provisional dental implant of Claim 63, wherein the width of the apical surface of the threads adjacent the neck segment is between 0.10mm and 0.15mm.

69. (New) An integrally-formed immediate provisional dental implant elongated along an implant axis, comprising:

an abutment adapted to bond with a dental prosthesis;

a flexible neck segment connected to the abutment;

a body segment connected to the flexible neck segment, the body segment having threads extending helically about the implant axis, the thread diameter tapering non-linearly from a maximum adjacent the neck segment to a minimum at a distal end, the threads having a flat apical surface increasing in width from a minimum adjacent the neck segment to a maximum at the distal end; and

a torque engagement segment position below the flexible neck segment and above the body segment, said torque segment configured to engage a torque-imparting tool.